

**ELBOW 90°**

| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 900/0008  | ¼"  | 8         |
| 900/0010  | ⅜"  | 10        |
| 900/0015  | ½"  | 15        |
| 900/0020  | ¾"  | 20        |
| 900/0025  | 1"  | 25        |
| 900/0032  | 1½" | 32        |
| 900/0040  | 1½" | 40        |
| 900/0050  | 2"  | 50        |
| 900/0065  | 2½" | 65        |
| 900/0080  | 3"  | 80        |
| 900/0100  | 4"  | 100       |
| 900/0150  | 6"  | 150       |

**ELBOW 45°**

| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 903/0015  | ½"  | 15        |
| 903/0020  | ¾"  | 20        |
| 903/0025  | 1"  | 25        |
| 903/0032  | 1½" | 32        |
| 903/0040  | 1½" | 40        |
| 903/0050  | 2"  | 50        |
| 903/0065  | 2½" | 65        |
| 903/0080  | 3"  | 80        |
| 903/0100  | 4"  | 100       |
| 903/0150  | 6"  | 150       |

**ELBOW 90° MxF**

| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 901/0008  | ¼"  | 8         |
| 901/0010  | ⅜"  | 10        |
| 901/0015  | ½"  | 15        |
| 901/0020  | ¾"  | 20        |
| 901/0025  | 1"  | 25        |
| 901/0032  | 1½" | 32        |
| 901/0040  | 1½" | 40        |
| 901/0050  | 2"  | 50        |
| 901/0065  | 2½" | 65        |
| 901/0080  | 3"  | 80        |
| 901/0100  | 4"  | 100       |

**REDUCING ELBOW 90°**

| ITEM CODE     | BSP      | METRIC mm | ITEM CODE     | BSP       | METRIC mm | ITEM CODE     | BSP       | METRIC mm |
|---------------|----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| 902/0020x0015 | ¾" x ½"  | 20 x 15   | 902/0040x0025 | 1½" x 1"  | 40 x 25   | 902/0065x0040 | 2½" x 1½" | 65 x 40   |
| 902/0025x0015 | 1" x ½"  | 25 x 15   | 902/0040x0032 | 1½" x 1¼" | 40 x 32   | 902/0065x0050 | 2½" x 2"  | 65 x 50   |
| 902/0025x0020 | 1" x ¾"  | 25 x 20   | 902/0050x0015 | 2" x ½"   | 50 x 15   | 902/0080x0040 | 3" x 1½"  | 80 x 40   |
| 902/0032x0015 | 1¼" x ½" | 32 x 15   | 902/0050x0020 | 2" x ¾"   | 50 x 20   | 902/0080x0050 | 3" x 2"   | 80 x 50   |
| 902/0032x0020 | 1¼" x ¾" | 32 x 20   | 902/0050x0025 | 2" x 1"   | 50 x 25   | 902/0080x0065 | 3" x 2½"  | 80 x 65   |
| 902/0032x0025 | 1¼" x 1" | 32 x 25   | 902/0050x0032 | 2" x 1¼"  | 50 x 32   | 902/0100x0050 | 4" x 2"   | 100 x 50  |
| 902/0040x0015 | 1½" x ½" | 40 x 15   | 902/0050x0040 | 2" x 1½"  | 50 x 40   | 902/0100x0065 | 4" x 2½"  | 100 x 65  |
| 902/0040x0020 | 1½" x ¾" | 40 x 20   | 902/0065x0032 | 2½" x 1¼" | 65 x 32   | 902/0100x0080 | 4" x 3"   | 100 x 80  |

**SOCKET**

| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 909/0008  | ¼"  | 8         |
| 909/0010  | ⅜"  | 10        |
| 909/0015  | ½"  | 15        |
| 909/0020  | ¾"  | 20        |
| 909/0025  | 1"  | 25        |
| 909/0032  | 1½" | 32        |
| 909/0040  | 1½" | 40        |
| 909/0050  | 2"  | 50        |
| 909/0065  | 2½" | 65        |
| 909/0080  | 3"  | 80        |
| 909/0100  | 4"  | 100       |
| 909/0150  | 6"  | 150       |

**REDUCING SOCKET**

| ITEM CODE     | BSP       | METRIC mm | ITEM CODE     | BSP       | METRIC mm |
|---------------|-----------|-----------|---------------|-----------|-----------|
| 910/0015x0010 | ½" x ⅜"   | 15 x 10   | 910/0065x0025 | 2½" x 1"  | 65 x 25   |
| 910/0020x0015 | ¾" x ½"   | 20 x 15   | 910/0065x0032 | 2½" x 1¼" | 65 x 32   |
| 910/0025x0015 | 1" x ½"   | 25 x 15   | 910/0065x0040 | 2½" x 1½" | 65 x 40   |
| 910/0025x0020 | 1" x ¾"   | 25 x 20   | 910/0065x0050 | 2½" x 2"  | 65 x 50   |
| 910/0032x0015 | 1¼" x ½"  | 32 x 15   | 910/0080x0020 | 3" x ¾"   | 80 x 20   |
| 910/0032x0020 | 1¼" x ¾"  | 32 x 20   | 910/0080x0025 | 3" x 1"   | 80 x 25   |
| 910/0032x0025 | 1¼" x 1"  | 32 x 25   | 910/0080x0032 | 3" x 1¼"  | 80 x 32   |
| 910/0040x0015 | 1½" x ½"  | 40 x 15   | 910/0080x0040 | 3" x 1½"  | 80 x 40   |
| 910/0040x0020 | 1½" x ¾"  | 40 x 20   | 910/0080x0050 | 3" x 2"   | 80 x 50   |
| 910/0040x0025 | 1½" x 1"  | 40 x 25   | 910/0080x0065 | 3" x 2½"  | 80 x 64   |
| 910/0040x0032 | 1½" x 1¼" | 40 x 32   | 910/0100x0025 | 4" x 1"   | 100 x 25  |
| 910/0050x0015 | 2" x ½"   | 50 x 15   | 910/0100x0032 | 4" x 1¼"  | 100 x 32  |
| 910/0050x0020 | 2" x ¾"   | 50 x 20   | 910/0100x0040 | 4" x 1½"  | 100 x 40  |
| 910/0050x0025 | 2" x 1"   | 50 x 25   | 910/0100x0050 | 4" x 2"   | 100 x 50  |
| 910/0050x0032 | 2" x 1¼"  | 50 x 32   | 910/0100x0065 | 4" x 2½"  | 100 x 65  |
| 910/0050x0040 | 2" x 1½"  | 50 x 40   | 910/0100x0080 | 4" x 3"   | 100 x 80  |



### TEE



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 912/0008  | ¼"  | 8         |
| 912/0010  | ⅜"  | 10        |
| 912/0015  | ½"  | 15        |
| 912/0020  | ¾"  | 20        |
| 912/0025  | 1"  | 25        |
| 912/0032  | 1¼" | 32        |
| 912/0040  | 1½" | 40        |
| 912/0050  | 2"  | 50        |
| 912/0065  | 2½" | 65        |
| 912/0080  | 3"  | 80        |
| 912/0100  | 4"  | 100       |
| 912/0150  | 6"  | 150       |

### REDUCING TEE



| ITEM CODE     | BSP       | METRIC mm | ITEM CODE     | BSP       | METRIC mm |
|---------------|-----------|-----------|---------------|-----------|-----------|
| 913/0020x0015 | ¾" x ½"   | 20 x 15   | 913/0050x0025 | 2" x 1"   | 50 x 25   |
| 913/0025x0015 | 1" x ½"   | 25 x 15   | 913/0050x0032 | 2" x 1¼"  | 50 x 32   |
| 913/0025x0020 | 1" x ¾"   | 25 x 20   | 913/0050x0040 | 2" x 1½"  | 50 x 40   |
| 913/0032x0015 | 1¼" x ½"  | 32 x 15   | 913/0065x0025 | 2½" x 1"  | 65 x 25   |
| 913/0032x0020 | 1¼" x ¾"  | 32 x 20   | 913/0065x0032 | 2½" x 1¼" | 65 x 32   |
| 913/0032x0025 | 1¼" x 1"  | 32 x 25   | 913/0065x0040 | 2½" x 1½" | 65 x 40   |
| 913/0040x0015 | 1½" x ½"  | 40 x 15   | 913/0080x0050 | 3" x 2"   | 80 x 50   |
| 913/0040x0020 | 1½" x ¾"  | 40 x 20   | 913/0080x0065 | 3" x 2½"  | 80 x 65   |
| 913/0040x0025 | 1½" x 1"  | 40 x 25   | 913/0100x0050 | 4" x 2"   | 100 x 50  |
| 913/0040x0032 | 1½" x 1¼" | 40 x 32   | 913/0100x0065 | 4" x 2½"  | 100 x 65  |
| 913/0050x0015 | 2" x ½"   | 50 x 15   | 913/0100x0080 | 4" x 3"   | 100 x 80  |
| 913/0050x0020 | 2" x ¾"   | 50 x 20   |               |           |           |

### BARREL NIPPLE



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 914/0008  | ¼"  | 8         |
| 914/0010  | ⅜"  | 10        |
| 914/0015  | ½"  | 15        |
| 914/0020  | ¾"  | 20        |
| 914/0025  | 1"  | 25        |
| 914/0032  | 1¼" | 32        |
| 914/0040  | 1½" | 40        |
| 914/0050  | 2"  | 50        |
| 914/0065  | 2½" | 65        |
| 914/0080  | 3"  | 80        |
| 914/0100  | 4"  | 100       |
| 914/0150  | 6"  | 150       |

### BEND 90° MxF



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 905/0015  | ½"  | 15        |
| 905/0020  | ¾"  | 20        |
| 905/0025  | 1"  | 25        |
| 905/0032  | 1¼" | 32        |
| 905/0040  | 1½" | 40        |
| 905/0050  | 2"  | 50        |
| 905/0065  | 2½" | 65        |
| 905/0080  | 3"  | 80        |
| 905/0100  | 4"  | 100       |

### BEND 90° FxF



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 904/0015  | ½"  | 15        |
| 904/0020  | ¾"  | 20        |
| 904/0025  | 1"  | 25        |
| 904/0032  | 1¼" | 32        |
| 904/0040  | 1½" | 40        |
| 904/0050  | 2"  | 50        |
| 904/0065  | 2½" | 65        |
| 904/0080  | 3"  | 80        |
| 904/0100  | 4"  | 100       |

### HEXAGON NIPPLE



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 915/0010  | ⅜"  | 10        |
| 915/0015  | ½"  | 15        |
| 915/0020  | ¾"  | 20        |
| 915/0025  | 1"  | 25        |
| 915/0032  | 1¼" | 32        |
| 915/0040  | 1½" | 40        |
| 915/0050  | 2"  | 50        |
| 915/0065  | 2½" | 65        |
| 915/0080  | 3"  | 80        |
| 915/0100  | 4"  | 100       |

### SWAGE NIPPLE



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 917/0015  | ½"  | 15        |
| 917/0020  | ¾"  | 20        |
| 917/0025  | 1"  | 25        |
| 917/0032  | 1¼" | 32        |
| 917/0040  | 1½" | 40        |
| 917/0050  | 2"  | 50        |
| 917/0065  | 2½" | 65        |
| 917/0080  | 3"  | 80        |
| 917/0100  | 4"  | 100       |
| 917/0150  | 6"  | 150       |

### SWAGE COUPLING



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 918/0015  | ½"  | 15        |
| 918/0020  | ¾"  | 20        |
| 918/0025  | 1"  | 25        |
| 918/0032  | 1¼" | 32        |
| 918/0040  | 1½" | 40        |
| 918/0050  | 2"  | 50        |
| 918/0065  | 2½" | 65        |
| 918/0080  | 3"  | 80        |
| 918/0100  | 4"  | 100       |
| 918/0150  | 6"  | 150       |
| 918/0200  | 8"  | 200       |

### UNION CONICAL



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 921/0015  | ½"  | 15        |
| 921/0020  | ¾"  | 20        |
| 921/0025  | 1"  | 25        |
| 921/0032  | 1¼" | 32        |
| 921/0040  | 1½" | 40        |
| 921/0050  | 2"  | 50        |
| 921/0065  | 2½" | 65        |
| 921/0080  | 3"  | 80        |
| 921/0100  | 4"  | 100       |

### HOLLOW PLUG



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 923/0008  | ¼"  | 8         |
| 923/0010  | ⅜"  | 10        |
| 923/0015  | ½"  | 15        |
| 923/0020  | ¾"  | 20        |
| 923/0025  | 1"  | 25        |
| 923/0032  | 1¼" | 32        |
| 923/0040  | 1½" | 40        |
| 923/0050  | 2"  | 50        |
| 923/0065  | 2½" | 65        |
| 923/0080  | 3"  | 80        |
| 923/0100  | 4"  | 100       |

### ROUND CAP



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 922/0010  | ⅜"  | 10        |
| 922/0015  | ½"  | 15        |
| 922/0020  | ¾"  | 20        |
| 922/0025  | 1"  | 25        |
| 922/0032  | 1¼" | 32        |
| 922/0040  | 1½" | 40        |
| 922/0050  | 2"  | 50        |
| 922/0065  | 2½" | 65        |
| 922/0080  | 3"  | 80        |
| 922/0100  | 4"  | 100       |

### JOHNSON COUPLING



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 919/0015  | ½"  | 15        |
| 919/0020  | ¾"  | 20        |
| 919/0025  | 1"  | 25        |
| 919/0032  | 1¼" | 32        |
| 919/0040  | 1½" | 40        |
| 919/0050  | 2"  | 50        |

### LONG SCREW COMPLETE



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 933/0015  | ½"  | 15        |
| 933/0020  | ¾"  | 20        |
| 933/0025  | 1"  | 25        |
| 933/0032  | 1¼" | 32        |
| 933/0040  | 1½" | 40        |
| 933/0050  | 2"  | 50        |

### HOLDERBAT



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 930/0015  | ½"  | 15        |
| 930/0020  | ¾"  | 20        |
| 930/0025  | 1"  | 25        |
| 930/0032  | 1¼" | 32        |
| 930/0040  | 1½" | 40        |
| 930/0050  | 2"  | 50        |

### REDUCING BUSH



| ITEM CODE     | BSP      | METRIC mm | ITEM CODE     | BSP       | METRIC mm | ITEM CODE     | BSP      | METRIC mm |
|---------------|----------|-----------|---------------|-----------|-----------|---------------|----------|-----------|
| 920/0010x0008 | ⅜" x ¼"  | 10 x 8    | 920/0040x0032 | 1½" x 1¼" | 40 x 32   | 920/0080x0025 | 3" x 1"  | 80 x 25   |
| 920/0015x0008 | ½" x ¼"  | 15 x 8    | 920/0050x0015 | 2" x ½"   | 50 x 15   | 920/0080x0032 | 3" x 1¼" | 80 x 32   |
| 920/0015x0010 | ½" x ⅜"  | 15 x 10   | 920/0050x0020 | 2" x ¾"   | 50 x 20   | 920/0080x0040 | 3" x 1½" | 80 x 40   |
| 920/0020x0008 | ¾" x ¼"  | 20 x 8    | 920/0050x0025 | 2" x 1"   | 50 x 25   | 920/0080x0050 | 3" x 2"  | 80 x 50   |
| 920/0020x0010 | ¾" x ⅜"  | 20 x 10   | 920/0050x0032 | 2" x 1¼"  | 50 x 32   | 920/0080x0065 | 3" x 2½" | 80 x 65   |
| 920/0020x0015 | ¾" x ½"  | 20 x 15   | 920/0050x0040 | 2" x 1½"  | 50 x 40   | 920/0100x0015 | 4" x ½"  | 100 x 15  |
| 920/0025x0015 | 1" x ½"  | 25 x 15   | 920/0065x0015 | 2½" x ½"  | 65 x 15   | 920/0100x0020 | 4" x ¾"  | 100 x 20  |
| 920/0025x0020 | 1" x ¾"  | 25 x 20   | 920/0065x0020 | 2½" x ¾"  | 65 x 20   | 920/0100x0025 | 4" x 1"  | 100 x 25  |
| 920/0032x0015 | 1¼" x ½" | 32 x 15   | 920/0065x0025 | 2½" x 1"  | 65 x 25   | 920/0100x0032 | 4" x 1¼" | 100 x 32  |
| 920/0032x0020 | 1¼" x ¾" | 32 x 20   | 920/0065x0032 | 2½" x 1¼" | 65 x 32   | 920/0100x0040 | 4" x 1½" | 100 x 40  |
| 920/0032x0025 | 1¼" x 1" | 32 x 25   | 920/0065x0040 | 2½" x 1½" | 65 x 40   | 920/0100x0050 | 4" x 2"  | 100 x 50  |
| 920/0040x0015 | 1½" x ½" | 40 x 15   | 920/0065x0050 | 2½" x 2"  | 65 x 50   | 920/0100x0065 | 4" x 2½" | 100 x 65  |
| 920/0040x0020 | 1½" x ¾" | 40 x 20   | 920/0080x0015 | 3" x ½"   | 80 x 15   | 920/0100x0080 | 4" x 3"  | 100 x 80  |
| 920/0040x0025 | 1½" x 1" | 40 x 25   | 920/0080x0020 | 3" x ¾"   | 80 x 20   |               |          |           |

### BACK NUT



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 931/0015  | ½"  | 15        |
| 931/0020  | ¾"  | 20        |
| 931/0025  | 1"  | 25        |
| 931/0032  | 1¼" | 32        |
| 931/0040  | 1½" | 40        |
| 931/0050  | 2"  | 50        |
| 931/0065  | 2½" | 65        |
| 931/0080  | 3"  | 80        |
| 931/0100  | 4"  | 100       |

### CROSS



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 924/0015  | ½"  | 15        |
| 924/0020  | ¾"  | 20        |
| 924/0025  | 1"  | 25        |
| 924/0032  | 1¼" | 32        |
| 924/0040  | 1½" | 40        |
| 924/0050  | 2"  | 50        |
| 924/0065  | 2½" | 65        |
| 924/0080  | 3"  | 80        |
| 924/0100  | 4"  | 100       |

### STEEL SOCKET



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 934/0015  | ½"  | 15        |
| 934/0020  | ¾"  | 20        |
| 934/0025  | 1"  | 25        |
| 934/0032  | 1¼" | 32        |
| 934/0040  | 1½" | 40        |
| 934/0050  | 2"  | 50        |
| 934/0065  | 2½" | 65        |
| 934/0080  | 3"  | 80        |
| 934/0100  | 4"  | 100       |



## STANDPIPE



| ITEM CODE    | BSP       | METRIC mm | ITEM CODE    | BSP        | METRIC mm | ITEM CODE    | BSP        | METRIC mm  |
|--------------|-----------|-----------|--------------|------------|-----------|--------------|------------|------------|
| 940/015x0150 | ½" x 150  | 15 x 150  | 940/032x0150 | 1¼" x 150  | 32 x 150  | 940/065x0150 | 2½" x 150  | 65 x 150   |
| 940/015x0200 | ½" x 200  | 15 x 200  | 940/032x0200 | 1¼" x 200  | 32 x 200  | 940/065x0200 | 2½" x 200  | 65 x 200   |
| 940/015x0300 | ½" x 300  | 15 x 300  | 940/032x0300 | 1¼" x 300  | 32 x 300  | 940/065x0300 | 2½" x 300  | 65 x 300   |
| 940/015x0400 | ½" x 400  | 15 x 400  | 940/032x0400 | 1¼" x 400  | 32 x 400  | 940/065x0400 | 2½" x 400  | 65 x 400   |
| 940/015x0450 | ½" x 450  | 15 x 450  | 940/032x0450 | 1¼" x 450  | 32 x 450  | 940/065x0450 | 2½" x 450  | 65 x 450   |
| 940/015x0500 | ½" x 500  | 15 x 500  | 940/032x0500 | 1¼" x 500  | 32 x 500  | 940/065x0500 | 2½" x 500  | 65 x 500   |
| 940/015x0600 | ½" x 600  | 15 x 600  | 940/032x0600 | 1¼" x 600  | 32 x 600  | 940/065x0600 | 2½" x 600  | 65 x 600   |
| 940/015x0750 | ½" x 750  | 15 x 750  | 940/032x0750 | 1¼" x 750  | 32 x 750  | 940/065x0750 | 2½" x 750  | 65 x 750   |
| 940/015x0900 | ½" x 900  | 15 x 900  | 940/032x0900 | 1¼" x 900  | 32 x 900  | 940/065x0900 | 2½" x 900  | 65 x 900   |
| 940/015x1000 | ½" x 1000 | 15 x 1000 | 940/032x1000 | 1¼" x 1000 | 32 x 1000 | 940/065x1000 | 2½" x 1000 | 65 x 1000  |
| 940/015x1200 | ½" x 1200 | 15 x 1200 |              |            |           |              |            |            |
| 940/020x0150 | ¾" x 150  | 20 x 150  | 940/040x0150 | 1½" x 150  | 40 x 150  | 940/080x0150 | 3" x 150   | 80 x 150   |
| 940/020x0200 | ¾" x 200  | 20 x 200  | 940/040x0200 | 1½" x 200  | 40 x 200  | 940/080x0200 | 3" x 200   | 80 x 200   |
| 940/020x0300 | ¾" x 300  | 20 x 300  | 940/040x0300 | 1½" x 300  | 40 x 300  | 940/080x0300 | 3" x 300   | 80 x 300   |
| 940/020x0400 | ¾" x 400  | 20 x 400  | 940/040x0400 | 1½" x 400  | 40 x 400  | 940/080x0400 | 3" x 400   | 80 x 400   |
| 940/020x0450 | ¾" x 450  | 20 x 450  | 940/040x0450 | 1½" x 450  | 40 x 450  | 940/080x0450 | 3" x 450   | 80 x 450   |
| 940/020x0500 | ¾" x 500  | 20 x 500  | 940/040x0500 | 1½" x 500  | 40 x 500  | 940/080x0500 | 3" x 500   | 80 x 500   |
| 940/020x0600 | ¾" x 600  | 20 x 600  | 940/040x0600 | 1½" x 600  | 40 x 600  | 940/080x0600 | 3" x 600   | 80 x 600   |
| 940/020x0750 | ¾" x 750  | 20 x 750  | 940/040x0750 | 1½" x 750  | 40 x 750  | 940/080x0750 | 3" x 750   | 80 x 750   |
| 940/020x0900 | ¾" x 900  | 20 x 900  | 940/040x0900 | 1½" x 900  | 40 x 900  | 940/080x0900 | 3" x 900   | 80 x 900   |
| 940/020x1000 | ¾" x 1000 | 20 x 1000 | 940/040x1000 | 1½" x 1000 | 40 x 1000 | 940/080x1000 | 3" x 1000  | 80 x 1000  |
| 940/020x1200 | ¾" x 1200 | 20 x 1200 |              |            |           |              |            |            |
| 940/025x0150 | 1" x 150  | 25 x 150  | 940/050x0150 | 2" x 150   | 50 x 150  | 940/100x0150 | 4" x 150   | 100 x 150  |
| 940/025x0200 | 1" x 200  | 25 x 200  | 940/050x0200 | 2" x 200   | 50 x 200  | 940/100x0200 | 4" x 200   | 100 x 200  |
| 940/025x0300 | 1" x 300  | 25 x 300  | 940/050x0300 | 2" x 300   | 50 x 300  | 940/100x0300 | 4" x 300   | 100 x 300  |
| 940/025x0400 | 1" x 400  | 25 x 400  | 940/050x0400 | 2" x 400   | 50 x 400  | 940/100x0400 | 4" x 400   | 100 x 400  |
| 940/025x0450 | 1" x 450  | 25 x 450  | 940/050x0450 | 2" x 450   | 50 x 450  | 940/100x0450 | 4" x 450   | 100 x 450  |
| 940/025x0500 | 1" x 500  | 25 x 500  | 940/050x0500 | 2" x 500   | 50 x 500  | 940/100x0500 | 4" x 500   | 100 x 500  |
| 940/025x0600 | 1" x 600  | 25 x 600  | 940/050x0600 | 2" x 600   | 50 x 600  | 940/100x0600 | 4" x 600   | 100 x 600  |
| 940/025x0750 | 1" x 750  | 25 x 750  | 940/050x0750 | 2" x 750   | 50 x 750  | 940/100x0750 | 4" x 750   | 100 x 750  |
| 940/025x0900 | 1" x 900  | 25 x 900  | 940/050x0900 | 2" x 900   | 50 x 900  | 940/100x0900 | 4" x 900   | 100 x 900  |
| 940/025x1000 | 1" x 1000 | 25 x 1000 | 940/050x1000 | 2" x 1000  | 50 x 1000 | 940/100x1000 | 4" x 1000  | 100 x 1000 |

### TABLE 16 - THREADED FLANGE



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 937/0040  | 1½" | 40        |
| 937/0050  | 2"  | 50        |
| 937/0065  | 2½" | 65        |
| 937/0080  | 3"  | 80        |
| 937/0100  | 4"  | 100       |
| 937/0150  | 6"  | 150       |

### TABLE D - THREADED FLANGE



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 936/0015  | ½"  | 15        |
| 936/0020  | ¾"  | 20        |
| 936/0025  | 1"  | 25        |
| 936/0032  | 1¼" | 32        |
| 936/0040  | 1½" | 40        |
| 936/0050  | 2"  | 50        |
| 936/0065  | 2½" | 65        |
| 936/0080  | 3"  | 80        |
| 936/0100  | 4"  | 100       |
| 936/0150  | 6"  | 150       |

### TABLE D BACKING RING



| ITEM CODE | METRIC mm |
|-----------|-----------|
| 938/0040  | 40        |
| 938/0050  | 50        |
| 938/0063  | 63        |
| 938/0075  | 75        |
| 938/0090  | 90        |
| 938/0110  | 110       |
| 938/0125  | 125       |
| 938/0140  | 140       |
| 938/0160  | 160       |
| 938/0200  | 200       |
| 938/0250  | 250       |

### 1600/3 SLIP FLANGE



| ITEM CODE | METRIC mm |
|-----------|-----------|
| 939/0040  | 40        |
| 939/0050  | 50        |
| 939/0065  | 65        |
| 939/0080  | 80        |
| 939/0100  | 100       |
| 939/0150  | 150       |
| 939/0200  | 200       |
| 939/0250  | 250       |

### 1000/3 SLIP FLANGE



| ITEM CODE | METRIC mm |
|-----------|-----------|
| 926/0040  | 40        |
| 926/0050  | 50        |
| 926/0065  | 65        |
| 926/0080  | 80        |
| 926/0100  | 100       |
| 926/0150  | 150       |
| 926/0200  | 200       |

### TABLE D SLIP FLANGE



| ITEM CODE | METRIC mm |
|-----------|-----------|
| 927/0040  | 40        |
| 927/0050  | 50        |
| 927/0065  | 65        |
| 927/0080  | 80        |
| 927/0100  | 100       |
| 927/0150  | 150       |
| 927/0200  | 200       |

### ELBOW 90°



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 950/0008  | ¼"  | 8         |
| 950/0010  | ⅜"  | 10        |
| 950/0015  | ½"  | 15        |
| 950/0020  | ¾"  | 20        |
| 950/0025  | 1"  | 25        |
| 950/0032  | 1¼" | 32        |
| 950/0040  | 1½" | 40        |
| 950/0050  | 2"  | 50        |
| 950/0065  | 2½" | 65        |
| 950/0080  | 3"  | 80        |
| 950/0100  | 4"  | 100       |
| 950/0150  | 6"  | 150       |

### ELBOW 45°



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 953/0015  | ½"  | 15        |
| 953/0020  | ¾"  | 20        |
| 953/0025  | 1"  | 25        |
| 953/0032  | 1¼" | 32        |
| 953/0040  | 1½" | 40        |
| 953/0050  | 2"  | 50        |
| 953/0065  | 2½" | 65        |
| 953/0080  | 3"  | 80        |
| 953/0100  | 4"  | 100       |
| 953/0150  | 6"  | 150       |

### ELBOW 90° Mx F



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 951/0015  | ½"  | 15        |
| 951/0020  | ¾"  | 20        |
| 951/0025  | 1"  | 25        |
| 951/0032  | 1¼" | 32        |
| 951/0040  | 1½" | 40        |
| 951/0050  | 2"  | 50        |
| 951/0065  | 2½" | 65        |
| 951/0080  | 3"  | 80        |
| 951/0100  | 4"  | 100       |

### REDUCING ELBOW 90°



| ITEM CODE     | BSP      | METRIC mm | ITEM CODE     | BSP       | METRIC mm | ITEM CODE     | BSP       | METRIC mm |
|---------------|----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| 952/0020x0015 | ¾" x ½"  | 20 x 15   | 952/0040x0025 | 1½" x 1"  | 40 x 25   | 952/0065x0040 | 2½" x 1½" | 65 x 40   |
| 952/0025x0015 | 1" x ½"  | 25 x 15   | 952/0040x0032 | 1½" x 1¼" | 40 x 32   | 952/0065x0050 | 2½" x 2"  | 65 x 50   |
| 952/0025x0020 | 1" x ¾"  | 25 x 20   | 952/0050x0015 | 2" x ½"   | 50 x 15   | 952/0080x0040 | 3" x 1½"  | 80 x 40   |
| 952/0032x0015 | 1¼" x ½" | 32 x 15   | 952/0050x0020 | 2" x ¾"   | 50 x 20   | 952/0080x0050 | 3" x 2"   | 80 x 50   |
| 952/0032x0020 | 1¼" x ¾" | 32 x 20   | 952/0050x0025 | 2" x 1"   | 50 x 25   | 952/0080x0065 | 3" x 2½"  | 80 x 65   |
| 952/0032x0025 | 1¼" x 1" | 32 x 25   | 952/0050x0032 | 2" x 1¼"  | 50 x 32   | 952/0100x0050 | 4" x 2"   | 100 x 50  |
| 952/0040x0015 | 1½" x ½" | 40 x 15   | 952/0050x0040 | 2" x 1½"  | 50 x 40   | 952/0100x0065 | 4" x 2½"  | 100 x 65  |
| 952/0040x0020 | 1½" x ¾" | 40 x 20   | 952/0065x0032 | 2½" x 1¼" | 65 x 32   | 952/0100x0080 | 4" x 3"   | 100 x 80  |

### SOCKET



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 959/0008  | ¼"  | 8         |
| 959/0010  | ⅜"  | 10        |
| 959/0015  | ½"  | 15        |
| 959/0020  | ¾"  | 20        |
| 959/0025  | 1"  | 25        |
| 959/0032  | 1¼" | 32        |
| 959/0040  | 1½" | 40        |
| 959/0050  | 2"  | 50        |
| 959/0065  | 2½" | 65        |
| 959/0080  | 3"  | 80        |
| 959/0100  | 4"  | 100       |
| 959/0150  | 6"  | 150       |

### REDUCING SOCKET



| ITEM CODE     | BSP       | METRIC mm | ITEM CODE     | BSP       | METRIC mm |
|---------------|-----------|-----------|---------------|-----------|-----------|
| 960/0015x0010 | ½" x ⅜"   | 15 x 10   | 960/0065x0025 | 2½" x 1"  | 65 x 25   |
| 960/0020x0015 | ¾" x ½"   | 20 x 15   | 960/0065x0032 | 2½" x 1¼" | 65 x 32   |
| 960/0025x0015 | 1" x ½"   | 25 x 15   | 960/0065x0040 | 2½" x 1½" | 65 x 40   |
| 960/0025x0020 | 1" x ¾"   | 25 x 20   | 960/0065x0050 | 2½" x 2"  | 65 x 50   |
| 960/0032x0015 | 1¼" x ½"  | 32 x 15   | 960/0080x0020 | 3" x ¾"   | 80 x 20   |
| 960/0032x0020 | 1¼" x ¾"  | 32 x 20   | 960/0080x0025 | 3" x 1"   | 80 x 25   |
| 960/0032x0025 | 1¼" x 1"  | 32 x 25   | 960/0080x0032 | 3" x 1¼"  | 80 x 32   |
| 960/0040x0015 | 1½" x ½"  | 40 x 15   | 960/0080x0040 | 3" x 1½"  | 80 x 40   |
| 960/0040x0020 | 1½" x ¾"  | 40 x 20   | 960/0080x0050 | 3" x 2"   | 80 x 50   |
| 960/0040x0025 | 1½" x 1"  | 40 x 25   | 960/0080x0065 | 3" x 2½"  | 80 x 65   |
| 960/0040x0032 | 1½" x 1¼" | 40 x 32   | 960/0100x0025 | 4" x 1"   | 100 x 25  |
| 960/0050x0015 | 2" x ½"   | 50 x 15   | 960/0100x0032 | 4" x 1¼"  | 100 x 32  |
| 960/0050x0020 | 2" x ¾"   | 50 x 20   | 960/0100x0040 | 4" x 1½"  | 100 x 40  |
| 960/0050x0025 | 2" x 1"   | 50 x 25   | 960/0100x0050 | 4" x 2"   | 100 x 50  |
| 960/0050x0032 | 2" x 1¼"  | 50 x 32   | 960/0100x0065 | 4" x 2½"  | 100 x 65  |
| 960/0050x0040 | 2" x 1½"  | 50 x 40   | 960/0100x0080 | 4" x 3"   | 100 x 80  |



### TEE



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 962/0008  | ¼"  | 8         |
| 962/0010  | ⅜"  | 10        |
| 962/0015  | ½"  | 15        |
| 962/0020  | ¾"  | 20        |
| 962/0025  | 1"  | 25        |
| 962/0032  | 1¼" | 32        |
| 962/0040  | 1½" | 40        |
| 962/0050  | 2"  | 50        |
| 962/0065  | 2½" | 65        |
| 962/0080  | 3"  | 80        |
| 962/0100  | 4"  | 100       |
| 962/0150  | 6"  | 150       |

### REDUCING TEE



| ITEM CODE     | BSP       | METRIC mm | ITEM CODE     | BSP       | METRIC mm |
|---------------|-----------|-----------|---------------|-----------|-----------|
| 963/0020x0015 | ¾" x ½"   | 20 x 15   | 963/0050x0025 | 2" x 1"   | 50 x 25   |
| 963/0025x0015 | 1" x ½"   | 25 x 15   | 963/0050x0032 | 2" x 1¼"  | 50 x 32   |
| 963/0025x0020 | 1" x ¾"   | 25 x 20   | 963/0050x0040 | 2" x 1½"  | 50 x 40   |
| 963/0032x0015 | 1¼" x ½"  | 32 x 15   | 963/0065x0025 | 2½" x 1"  | 65 x 25   |
| 963/0032x0020 | 1¼" x ¾"  | 32 x 20   | 963/0065x0032 | 2½" x 1¼" | 65 x 32   |
| 963/0032x0025 | 1¼" x 1"  | 32 x 25   | 963/0065x0040 | 2½" x 1½" | 65 x 40   |
| 963/0040x0015 | 1½" x ½"  | 40 x 15   | 963/0080x0050 | 3" x 2"   | 80 x 50   |
| 963/0040x0020 | 1½" x ¾"  | 40 x 20   | 963/0080x0065 | 3" x 2½"  | 80 x 65   |
| 963/0040x0025 | 1½" x 1"  | 40 x 25   | 963/0100x0050 | 4" x 2"   | 100 x 50  |
| 963/0040x0032 | 1½" x 1¼" | 40 x 32   | 963/0100x0065 | 4" x 2½"  | 100 x 65  |
| 963/0050x0015 | 2" x ½"   | 50 x 15   | 963/0100x0080 | 4" x 3"   | 100 x 80  |
| 963/0050x0020 | 2" x ¾"   | 50 x 20   |               |           |           |

### ABNORMAL TEE



| ITEM CODE          | BSP             | METRIC mm    |
|--------------------|-----------------|--------------|
| 966/0032x0025x0015 | 1¼" x 1" x ½"   | 32 x 25 x 15 |
| 966/0032x0025x0025 | 1¼" x 1" x 1"   | 32 x 25 x 25 |
| 966/0040x0032x0015 | 1½" x 1¼" x ½"  | 40 x 32 x 15 |
| 966/0040x0032x0020 | 1½" x 1¼" x ¾"  | 40 x 32 x 20 |
| 966/0040x0032x0025 | 1½" x 1¼" x 1"  | 40 x 32 x 25 |
| 966/0040x0032x0032 | 1½" x 1¼" x 1¼" | 40 x 32 x 32 |
| 966/0050x0032x0025 | 2" x 1½" x 1"   | 50 x 32 x 25 |
| 966/0050x0040x0025 | 2" x 1½" x 1"   | 50 x 40 x 25 |

### BEND 90° MxF



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 955/0015  | ½"  | 15        |
| 955/0020  | ¾"  | 20        |
| 955/0025  | 1"  | 25        |
| 955/0032  | 1¼" | 32        |
| 955/0040  | 1½" | 40        |
| 955/0050  | 2"  | 50        |
| 955/0065  | 2½" | 65        |
| 955/0080  | 3"  | 80        |
| 955/0100  | 4"  | 100       |

### BEND 90° FxF



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 954/0015  | ½"  | 15        |
| 954/0020  | ¾"  | 20        |
| 954/0025  | 1"  | 25        |
| 954/0032  | 1¼" | 32        |
| 954/0040  | 1½" | 40        |
| 954/0050  | 2"  | 50        |
| 954/0065  | 2½" | 65        |
| 954/0080  | 3"  | 80        |
| 954/0100  | 4"  | 100       |

### BARREL NIPPLE



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 916/0008  | ¼"  | 8         |
| 916/0010  | ⅜"  | 10        |
| 916/0015  | ½"  | 15        |
| 916/0020  | ¾"  | 20        |
| 916/0025  | 1"  | 25        |
| 916/0032  | 1¼" | 32        |
| 916/0040  | 1½" | 40        |
| 916/0050  | 2"  | 50        |
| 916/0065  | 2½" | 65        |
| 916/0080  | 3"  | 80        |
| 916/0100  | 4"  | 100       |
| 916/0150  | 6"  | 150       |

### HEXAGON NIPPLE



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 965/0010  | ⅜"  | 10        |
| 965/0015  | ½"  | 15        |
| 965/0020  | ¾"  | 20        |
| 965/0025  | 1"  | 25        |
| 965/0032  | 1¼" | 32        |
| 965/0040  | 1½" | 40        |
| 965/0050  | 2"  | 50        |
| 965/0065  | 2½" | 65        |
| 965/0080  | 3"  | 80        |
| 965/0100  | 4"  | 100       |

### SWAGE NIPPLE



| ITEM CODE | BSP | METRIC mm |
|-----------|-----|-----------|
| 967/0015  | ½"  | 15        |
| 967/0020  | ¾"  | 20        |
| 967/0025  | 1"  | 25        |
| 967/0032  | 1¼" | 32        |
| 967/0040  | 1½" | 40        |
| 967/0050  | 2"  | 50        |
| 967/0065  | 2½" | 65        |
| 967/0080  | 3"  | 80        |
| 967/0100  | 4"  | 100       |
| 967/0150  | 6"  | 150       |

**ELBOW LONG RADIUS 90°**

| CODE     | SIZE mm | OD mm | ID mm |
|----------|---------|-------|-------|
| 942/0015 | 15      | 21.7  | 16.1  |
| 942/0020 | 20      | 27.2  | 21.6  |
| 942/0025 | 25      | 34.0  | 27.6  |
| 942/0032 | 32      | 42.7  | 35.7  |
| 942/0040 | 40      | 48.6  | 41.6  |
| 942/0050 | 50      | 60.5  | 52.9  |
| 942/0065 | 65      | 76.3  | 67.9  |
| 942/0080 | 80      | 89.1  | 80.7  |
| 942/0090 | 90      | 101.6 | 93.2  |
| 942/0100 | 100     | 114.3 | 105.3 |
| 942/0125 | 125     | 139.8 | 130.8 |
| 942/0150 | 150     | 165.2 | 155.2 |
| 942/0200 | *200    | 219.1 | 207.5 |
| 942/0250 | *250    | 273.0 | 259.8 |
| 942/0300 | *300    | 323.8 | 310.0 |
| 942/0350 | 350     | 355.6 | 339.8 |
| 942/0400 | 400     | 406.4 | 390.6 |
| 942/0450 | 450     | 457.2 | 441.4 |
| 942/0500 | 500     | 508.0 | 492.2 |
| 942/0550 | 550     | 558.8 | 543.0 |
| 942/0600 | 600     | 609.6 | 593.8 |

**ELBOW SHORT RADIUS 90°**

| CODE     | SIZE mm | OD mm | ID mm |
|----------|---------|-------|-------|
| 943/0015 | 15      | 21.7  | 16.1  |
| 943/0020 | 20      | 27.2  | 21.6  |
| 943/0025 | 25      | 34.0  | 27.6  |
| 943/0032 | 32      | 42.7  | 35.7  |
| 943/0040 | 40      | 48.6  | 41.6  |
| 943/0050 | 50      | 60.5  | 52.9  |
| 943/0065 | 65      | 76.3  | 67.9  |
| 943/0080 | 80      | 89.1  | 80.7  |
| 943/0090 | 90      | 101.6 | 93.2  |
| 943/0100 | 100     | 114.3 | 105.3 |
| 943/0125 | 125     | 139.8 | 130.8 |
| 943/0150 | 150     | 165.2 | 155.2 |
| 943/0200 | *200    | 219.1 | 207.5 |
| 943/0250 | *250    | 273.0 | 259.8 |
| 943/0300 | *300    | 323.8 | 310.0 |
| 943/0350 | 350     | 355.6 | 339.8 |
| 943/0400 | 400     | 406.4 | 390.6 |
| 943/0450 | 450     | 457.2 | 441.4 |
| 943/0500 | 500     | 508.0 | 492.2 |
| 943/0550 | 550     | 558.8 | 543.0 |
| 943/0600 | 600     | 609.6 | 593.8 |

**ELBOW 45°**

| CODE     | SIZE mm | OD mm | ID mm |
|----------|---------|-------|-------|
| 944/0015 | 15      | 21.7  | 16.1  |
| 944/0020 | 20      | 27.2  | 21.6  |
| 944/0025 | 25      | 34.0  | 27.6  |
| 944/0032 | 32      | 42.7  | 35.7  |
| 944/0040 | 40      | 48.6  | 41.6  |
| 944/0050 | 50      | 60.5  | 52.9  |
| 944/0065 | 65      | 76.3  | 67.9  |
| 944/0080 | 80      | 89.1  | 80.7  |
| 944/0090 | 90      | 101.6 | 93.2  |
| 944/0100 | 100     | 114.3 | 105.3 |
| 944/0125 | 125     | 139.8 | 130.8 |
| 944/0150 | 150     | 165.2 | 155.2 |
| 944/0200 | *200    | 219.1 | 207.5 |
| 944/0250 | *250    | 273.0 | 259.8 |
| 944/0300 | *300    | 323.8 | 310.0 |
| 944/0350 | 350     | 355.6 | 339.8 |
| 944/0400 | 400     | 406.4 | 390.6 |
| 944/0450 | 450     | 457.2 | 441.4 |
| 944/0500 | 500     | 508.0 | 492.2 |
| 944/0550 | 550     | 558.8 | 543.0 |
| 944/0600 | 600     | 609.6 | 593.8 |

**TEE**

| CODE     | SIZE mm | OD mm | ID mm |
|----------|---------|-------|-------|
| 947/0015 | 15      | 21.7  | 16.1  |
| 947/0020 | 20      | 27.2  | 21.6  |
| 947/0025 | 25      | 34.0  | 27.6  |
| 947/0032 | 32      | 42.7  | 35.7  |
| 947/0040 | 40      | 48.6  | 41.6  |
| 947/0050 | 50      | 60.5  | 52.9  |
| 947/0065 | 65      | 76.3  | 67.9  |
| 947/0080 | 80      | 89.1  | 80.7  |
| 947/0090 | 90      | 101.6 | 93.2  |
| 947/0100 | 100     | 114.3 | 105.3 |
| 947/0125 | 125     | 139.8 | 130.8 |
| 947/0150 | 150     | 165.2 | 155.2 |
| 947/0200 | *200    | 219.1 | 207.5 |
| 947/0250 | *250    | 273.0 | 259.8 |
| 947/0300 | *300    | 323.8 | 310.0 |
| 947/0350 | 350     | 355.6 | 339.8 |
| 947/0400 | 400     | 406.4 | 390.6 |
| 947/0450 | 450     | 457.2 | 441.4 |
| 947/0500 | 500     | 508.0 | 492.2 |
| 947/0550 | 550     | 558.8 | 543.0 |
| 947/0600 | 600     | 609.6 | 593.8 |

**CAP**

| CODE     | SIZE mm | OD mm | ID mm |
|----------|---------|-------|-------|
| 949/0015 | 15      | 21.7  | 16.1  |
| 949/0020 | 20      | 27.2  | 21.6  |
| 949/0025 | 25      | 34.0  | 27.6  |
| 949/0032 | 32      | 42.7  | 35.7  |
| 949/0040 | 40      | 48.6  | 41.6  |
| 949/0050 | 50      | 60.5  | 52.9  |
| 949/0065 | 65      | 76.3  | 67.9  |
| 949/0080 | 80      | 89.1  | 80.7  |
| 949/0090 | 90      | 101.6 | 93.2  |
| 949/0100 | 100     | 114.3 | 105.3 |
| 949/0125 | 125     | 139.8 | 130.8 |
| 949/0150 | 150     | 165.2 | 155.2 |
| 949/0200 | *200    | 219.1 | 207.5 |
| 949/0250 | *250    | 273.0 | 259.8 |
| 949/0300 | *300    | 323.8 | 310.0 |
| 949/0350 | 350     | 355.6 | 339.8 |
| 949/0400 | 400     | 406.4 | 390.6 |
| 949/0450 | 450     | 457.2 | 441.4 |
| 949/0500 | 500     | 508.0 | 492.2 |
| 949/0550 | 550     | 558.8 | 543.0 |
| 949/0600 | 600     | 609.6 | 593.8 |



## REDUCER CONCENTRIC



| CODE          | SIZE mm  | OD           | CODE          | SIZE mm    | OD            | CODE          | SIZE mm    | OD            |
|---------------|----------|--------------|---------------|------------|---------------|---------------|------------|---------------|
| 945/0020x0015 | 20 x 15  | 27.2 x 21.7  | 945/0100x0050 | 100 x 50   | 114.3 x 60.5  | 945/0350x0200 | 350 x 200  | 355.6 x 219.1 |
| 945/0025x0015 | 25 x 15  | 24.0 x 21.7  | 945/0100x0065 | 100 x 65   | 114.3 x 76.3  | 945/0350x0250 | *350 x 250 | 355.6 x 273.0 |
| 945/0025x0020 | 25 x 20  | 34.0 x 27.2  | 945/0100x0080 | 100 x 80   | 114.3 x 89.1  | 945/0350x0300 | *350 x 300 | 355.6 x 323.8 |
| 945/0032x0015 | 32 x 15  | 42.7 x 21.7  | 945/0100x0090 | 100 x 90   | 114.3 x 101.6 | 945/0400x0150 | 400 x 150  | 406.4 x 165.2 |
| 945/0032x0020 | 32 x 20  | 42.7 x 27.2  | 945/0125x0050 | 125 x 50   | 139.8 x 60.5  | 945/0400x0200 | *400 x 200 | 406.4 x 219.1 |
| 945/0032x0025 | 32 x 25  | 42.7 x 34.0  | 945/0125x0065 | 125 x 65   | 139.8 x 76.3  | 945/0400x0250 | *400 x 250 | 406.4 x 273.0 |
| 945/0040x0015 | 40 x 15  | 48.6 x 21.7  | 945/0125x0080 | 125 x 80   | 139.8 x 89.1  | 945/0400x0300 | 400 x 300  | 406.4 x 318.5 |
| 945/0040x0020 | 40 x 20  | 48.6 x 27.2  | 945/0125x0090 | 125 x 90   | 139.8 x 101.6 | 945/0400x0350 | 400 x 350  | 406.4 x 355.6 |
| 945/0040x0025 | 40 x 25  | 48.6 x 34.0  | 945/0125x0100 | 125 x 100  | 139.8 x 114.3 | 945/0450x0250 | *450 x 250 | 457.2 x 273.0 |
| 945/0040x0032 | 40 x 32  | 48.6 x 42.7  | 945/0150x0065 | 150 x 65   | 165.2 x 76.3  | 945/0450x0300 | *450 x 300 | 457.2 x 323.8 |
| 945/0050x0020 | 50 x 20  | 60.5 x 27.2  | 945/0150x0080 | 150 x 80   | 165.2 x 89.1  | 945/0450x0350 | 450 x 350  | 457.2 x 355.6 |
| 945/0050x0025 | 50 x 25  | 60.5 x 34.0  | 945/0150x0090 | 150 x 90   | 165.2 x 101.6 | 945/0500x0400 | 450 x 400  | 457.2 x 406.4 |
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| 945/0065x0025 | 65 x 25  | 76.3 x 34.0  | 945/0200x0080 | *200 x 80  | 219.1 x 89.1  | 945/0500x0300 | *500 x 300 | 508.0 x 323.8 |
| 945/0065x0032 | 65 x 32  | 76.3 x 42.7  | 945/0200x0090 | *200 x 90  | 219.1 x 101.6 | 945/0500x0350 | 500 x 350  | 508.0 x 355.6 |
| 945/0065x0040 | 65 x 40  | 76.3 x 48.6  | 945/0200x0100 | *200 x 100 | 219.1 x 114.3 | 945/0500x0400 | 500 x 400  | 508.0 x 406.4 |
| 945/0065x0050 | 65 x 50  | 76.3 x 60.5  | 945/0200x0125 | *200 x 125 | 219.1 x 139.8 | 945/0500x0450 | 500 x 450  | 508.0 x 457.2 |
| 945/0080x0032 | 80 x 32  | 89.1 x 42.7  | 945/0200x0150 | *200 x 150 | 219.1 x 165.2 | 945/0550x0350 | 550 x 350  | 508.8 x 355.6 |
| 945/0080x0040 | 80 x 40  | 89.1 x 48.6  | 945/0250x0100 | *250 x 100 | 273.0 x 114.3 | 945/0550x0400 | 550 x 400  | 558.8 x 406.4 |
| 945/0080x0050 | 80 x 50  | 89.1 x 60.5  | 945/0250x0125 | *250 x 125 | 273.0 x 139.8 | 945/0550x0450 | 550 x 450  | 558.8 x 457.2 |
| 945/0080x0065 | 80 x 65  | 89.1 x 76.3  | 945/0250x0150 | *250 x 150 | 273.0 x 165.2 | 945/0550x0500 | 550 x 500  | 558.8 x 508.0 |
| 945/0090x0032 | 90 x 32  | 101.8 x 42.7 | 945/0250x0200 | *250 x 200 | 273.0 x 219.1 | 945/0600x0400 | 600 x 400  | 609.6 x 406.4 |
| 945/0090x0040 | 90 x 40  | 101.6 x 48.6 | 945/0300x0125 | *300 x 125 | 323.8 x 139.8 | 945/0600x0450 | 600 x 450  | 609.6 x 457.2 |
| 945/0090x0050 | 90 x 50  | 101.6 x 60.5 | 945/0300x0150 | *300 x 150 | 323.8 x 165.2 | 945/0600x0500 | 600 x 500  | 609.6 x 508.0 |
| 945/0090x0065 | 90 x 65  | 101.6 x 76.3 | 945/0300x0200 | *300 x 200 | 323.8 x 219.1 | 945/0600x0550 | 600 x 550  | 609.6 x 558.8 |
| 945/0090x0080 | 90 x 80  | 101.6 x 89.1 | 945/0300x0250 | *300 x 250 | 323.8 x 373.0 |               |            |               |
| 945/0100x0040 | 100 x 40 | 114.3 x 48.6 | 945/0350x0150 | 350 x 150  | 355.6 x 165.2 |               |            |               |

## REDUCER ECCENTRIC



| CODE          | SIZE mm  | OD           | CODE          | SIZE mm    | OD            | CODE          | SIZE mm    | OD            |
|---------------|----------|--------------|---------------|------------|---------------|---------------|------------|---------------|
| 946/0020x0015 | 20 x 15  | 27.2 x 21.7  | 946/0100x0050 | 100 x 50   | 114.3 x 60.5  | 946/0350x0200 | 350 x 200  | 355.6 x 219.1 |
| 946/0025x0015 | 25 x 15  | 24.0 x 21.7  | 946/0100x0065 | 100 x 65   | 114.3 x 76.3  | 946/0350x0250 | *350 x 250 | 355.6 x 273.0 |
| 946/0025x0020 | 25 x 20  | 34.0 x 27.2  | 946/0100x0080 | 100 x 80   | 114.3 x 89.1  | 946/0350x0300 | *350 x 300 | 355.6 x 323.8 |
| 946/0032x0015 | 32 x 15  | 42.7 x 21.7  | 946/0100x0090 | 100 x 90   | 114.3 x 101.6 | 946/0400x0150 | 400 x 150  | 406.4 x 165.2 |
| 946/0032x0020 | 32 x 20  | 42.7 x 27.2  | 946/0125x0050 | 125 x 50   | 139.8 x 60.5  | 946/0400x0200 | *400 x 200 | 406.4 x 219.1 |
| 946/0032x0025 | 32 x 25  | 42.7 x 34.0  | 946/0125x0065 | 125 x 65   | 139.8 x 76.3  | 946/0400x0250 | *400 x 250 | 406.4 x 273.0 |
| 946/0040x0015 | 40 x 15  | 48.6 x 21.7  | 946/0125x0080 | 125 x 80   | 139.8 x 89.1  | 946/0400x0300 | 400 x 300  | 406.4 x 318.5 |
| 946/0040x0020 | 40 x 20  | 48.6 x 27.2  | 946/0125x0090 | 125 x 90   | 139.8 x 101.6 | 946/0400x0350 | 400 x 350  | 406.4 x 355.6 |
| 946/0040x0025 | 40 x 25  | 48.6 x 34.0  | 946/0125x0100 | 125 x 100  | 139.8 x 114.3 | 946/0450x0250 | *450 x 250 | 457.2 x 273.0 |
| 946/0040x0032 | 40 x 32  | 48.6 x 42.7  | 946/0150x0065 | 150 x 65   | 165.2 x 76.3  | 946/0450x0300 | *450 x 300 | 457.2 x 323.8 |
| 946/0050x0020 | 50 x 20  | 60.5 x 27.2  | 946/0150x0080 | 150 x 80   | 165.2 x 89.1  | 946/0450x0350 | 450 x 350  | 457.2 x 355.6 |
| 946/0050x0025 | 50 x 25  | 60.5 x 34.0  | 946/0150x0090 | 150 x 90   | 165.2 x 101.6 | 946/0500x0400 | 450 x 400  | 457.2 x 406.4 |
| 946/0050x0032 | 50 x 32  | 60.5 x 42.7  | 946/0150x0100 | 150 x 100  | 165.2 x 114.3 | 946/0500x0200 | *500 x 200 | 508.0 x 219.1 |
| 946/0050x0040 | 50 x 40  | 60.5 x 48.6  | 946/0150x0125 | 150 x 125  | 165.2 x 139.8 | 946/0500x0250 | *500 x 250 | 508.0 x 273.0 |
| 946/0065x0025 | 65 x 25  | 76.3 x 34.0  | 946/0200x0080 | *200 x 80  | 219.1 x 89.1  | 946/0500x0300 | *500 x 300 | 508.0 x 323.8 |
| 946/0065x0032 | 65 x 32  | 76.3 x 42.7  | 946/0200x0090 | *200 x 90  | 219.1 x 101.6 | 946/0500x0350 | 500 x 350  | 508.0 x 355.6 |
| 946/0065x0040 | 65 x 40  | 76.3 x 48.6  | 946/0200x0100 | *200 x 100 | 219.1 x 114.3 | 946/0500x0400 | 500 x 400  | 508.0 x 406.4 |
| 946/0065x0050 | 65 x 50  | 76.3 x 60.5  | 946/0200x0125 | *200 x 125 | 219.1 x 139.8 | 946/0500x0450 | 500 x 450  | 508.0 x 457.2 |
| 946/0080x0032 | 80 x 32  | 89.1 x 42.7  | 946/0200x0150 | *200 x 150 | 219.1 x 165.2 | 946/0550x0350 | 550 x 350  | 508.8 x 355.6 |
| 946/0080x0040 | 80 x 40  | 89.1 x 48.6  | 946/0250x0100 | *250 x 100 | 273.0 x 114.3 | 946/0550x0400 | 550 x 400  | 558.8 x 406.4 |
| 946/0080x0050 | 80 x 50  | 89.1 x 60.5  | 946/0250x0125 | *250 x 125 | 273.0 x 139.8 | 946/0550x0450 | 550 x 450  | 558.8 x 457.2 |
| 946/0080x0065 | 80 x 65  | 89.1 x 76.3  | 946/0250x0150 | *250 x 150 | 273.0 x 165.2 | 946/0550x0500 | 550 x 500  | 558.8 x 508.0 |
| 946/0090x0032 | 90 x 32  | 101.8 x 42.7 | 946/0250x0200 | *250 x 200 | 273.0 x 219.1 | 946/0600x0400 | 600 x 400  | 609.6 x 406.4 |
| 946/0090x0040 | 90 x 40  | 101.6 x 48.6 | 946/0300x0125 | *300 x 125 | 323.8 x 139.8 | 946/0600x0450 | 600 x 450  | 609.6 x 457.2 |
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| 946/0090x0065 | 90 x 65  | 101.6 x 76.3 | 946/0300x0200 | *300 x 200 | 323.8 x 219.1 | 946/0600x0550 | 600 x 550  | 609.6 x 558.8 |
| 946/0090x0080 | 90 x 80  | 101.6 x 89.1 | 946/0300x0250 | *300 x 250 | 323.8 x 373.0 |               |            |               |
| 946/0100x0040 | 100 x 40 | 114.3 x 48.6 | 946/0350x0150 | 350 x 150  | 355.6 x 165.2 |               |            |               |

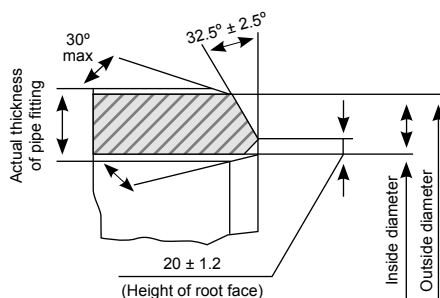


## TEE REDUCING



| CODE          | SIZE mm  | OD           | CODE          | SIZE mm    | OD            | CODE          | SIZE mm    | OD            |
|---------------|----------|--------------|---------------|------------|---------------|---------------|------------|---------------|
| 948/0020x0015 | 20 x 15  | 27.2 x 21.7  | 948/0100x0050 | 100 x 50   | 114.3 x 60.5  | 948/0350x0200 | 350 x 200  | 355.6 x 219.1 |
| 948/0025x0015 | 25 x 15  | 24.0 x 21.7  | 948/0100x0065 | 100 x 65   | 114.3 x 76.3  | 948/0350x0250 | *350 x 250 | 355.6 x 273.0 |
| 948/0025x0020 | 25 x 20  | 34.0 x 27.2  | 948/0100x0080 | 100 x 80   | 114.3 x 89.1  | 948/0350x0300 | *350 x 300 | 355.6 x 323.8 |
| 948/0032x0015 | 32 x 15  | 42.7 x 21.7  | 948/0100x0090 | 100 x 90   | 114.3 x 101.6 | 948/0400x0150 | 400 x 150  | 406.4 x 165.2 |
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| 948/0040x0025 | 40 x 25  | 48.6 x 34.0  | 948/0125x0100 | 125 x 100  | 139.8 x 114.3 | 948/0450x0250 | *450 x 250 | 457.2 x 273.0 |
| 948/0040x0032 | 40 x 32  | 48.6 x 42.7  | 948/0150x0065 | 150 x 65   | 165.2 x 76.3  | 948/0450x0300 | *450 x 300 | 457.2 x 323.8 |
| 948/0050x0020 | 50 x 20  | 60.5 x 27.2  | 948/0150x0080 | 150 x 80   | 165.2 x 89.1  | 948/0450x0350 | 450 x 350  | 457.2 x 355.6 |
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| 948/0080x0040 | 80 x 40  | 89.1 x 48.6  | 948/0250x0100 | *250 x 100 | 273.0 x 114.3 | 948/0550x0400 | 550 x 400  | 558.8 x 406.4 |
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| 948/0080x0065 | 80 x 65  | 89.1 x 76.3  | 948/0250x0150 | *250 x 150 | 273.0 x 165.2 | 948/0550x0500 | 550 x 500  | 558.8 x 508.0 |
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| 948/0090x0065 | 90 x 65  | 101.6 x 76.3 | 948/0300x0200 | *300 x 200 | 323.8 x 219.1 | 948/0600x0550 | 600 x 550  | 609.6 x 558.8 |
| 948/0090x0080 | 90 x 80  | 101.6 x 89.1 | 948/0300x0250 | *300 x 250 | 323.8 x 273.0 |               |            |               |
| 948/0100x0040 | 100 x 40 | 114.3 x 48.6 | 948/0350x0150 | 350 x 150  | 355.6 x 165.2 |               |            |               |

### DIMENSIONAL TOLERANCES AND PERMISSIBLE VALUES



| ITEM                                   | TYPES OF PIPE FITTINGS | NOMINAL DIAMETER mm |        |         |               |               |         |
|--|------------------------|---------------------|--------|---------|---------------|---------------|---------|
|  |                        | 15-65               | 80-100 | 125-200 | 250-450       | 500-600       | 650-750 |
| Outside diameter at end                | All fittings           | ± 2.0               | ± 2.5  | ± 3.5   | +5.0<br>- 4.5 | +6.4<br>- 4.8 |         |
| Inside diameter at end face            |                        | ± 2.0               | ± 2.5  | ± 3.5   | ± 4.5         | ± 4.8         |         |
| Thickness                              |                        | *not specified -15% |        |         |               |               |         |
| Bevel angle                            |                        | See Fig             |        |         |               |               |         |
| Height of root face                    |                        | See Fig             |        |         |               |               |         |
| Dimensions from centerline to end face | 45° Elbow<br>90° Elbow | ± 2.0               |        | ± 3.2   |               |               |         |
| Overall length                         | Reducers               | ± 2.0               |        | ± 3.2   |               | ± 4.8         |         |
| Dimension from centerline to end face  | Tees                   | ± 2.0               |        | ± 3.2   |               | ± 4.8         |         |
| Dimensions from back to end face       | Caps                   | ± 3.2               |        | ± 6.4   |               | -             |         |

